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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/303,791 | 04/30/1999 | RORY MATTHEW JOHNSON | G-00263/US | 8861 |

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EXAMINER

GARCIA, ERNESTO

ART UNIT PAPER NUMBER

3679

DATE MAILED: 09/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/303,791

Applicant(s)

JOHNSON, RORY MATTHEW

Examiner

Ernesto Garcia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 11 is objected to because of the following informalities:

as to claim 11, the limitation --a-- should be inserted before "sealing" in line 9.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Renzo et al., 5,308,284.

Regarding claim 1, Renzo et al. disclose a constant velocity universal joint boot comprising a cylindrical neck member **12** and annular member **14**. The annular member **14** has a longitudinal axis and a crimping lip **20**. The crimping lip **20** has radially distributed apertures **24, 26** oriented parallel to the longitudinal axis. The

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radially distributed apertures **24, 26** are for reducing stiffness and increasing compressibility of the crimping lip **20**.

Regarding claim 3, the radially distributed apertures **24, 26** are equally circumferentially spaced apart radially distributed cut-outs.

Claims 1, 2 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Welschof et al., 4,747,805.

Regarding claim 1, Welschof et al. disclose in Figures 1, 3 and 4 a constant velocity universal joint boot comprising a cylindrical neck member **2a** and annular member **2c**. The annular member **2c** has a longitudinal axis **1c** and a crimping lip **2d**. The crimping lip **2d** has radially distributed apertures **2e** oriented parallel to the longitudinal axis **1c**. The radially distributed apertures **2e** are for reducing stiffness and increasing compressibility of the crimping lip **2d**.

Regarding claim 2, the radially distributed apertures **2e** are equally circumferentially spaced apart radially distributed cut-outs.

Regarding claim 8, Welschof et al. disclose in Figures 1, 3 and 4 a constant velocity universal joint assembly comprising a constant velocity universal joint **1**, a boot-can **3** and a thermoplastic rolling-diaphragm boot **2**. The constant velocity universal

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joint 1 has an outer race 1a. The boot-can 3 has a first end (opposite of 3a) and a second flanged end 3. The boot 2 has a crimping lip 2d received by the second flanged end 3. the crimping lip 2d has radially distributed apertures 2e.

Regarding claim 9, the radially distributed apertures 2e include radially distributed holes.

Regarding claim 10, the radially distributed apertures 2e include radially distributed cut-outs.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moulinet, 6,093,108, (see marked-up attachment) in view of Welschof et al., 4,747,805.

Regarding claim 11, Moulinet discloses in Figure 1 a constant velocity joint and propeller shaft assembly comprising a propeller shaft 9, a constant velocity

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universal joint **1**, a boot-can **11**, and a thermoplastic boot **19**. The propeller shaft **9** has a first end **A17**. The constant velocity universal joint **1** includes an outer race **3** having a first face **A9**. The boot-can **11** has a large-diameter end **A10** and a small-diameter flange end **A11**. The thermoplastic boot **19** has a sealing end **A13**, a tubular stem portion **A14** and an annular upturned edge **A15**. The sealing end **A13** cooperates with the propeller shaft **9**. However, Moulinet fails to disclose the annular upturned edge **A15** having radially distributed apertures. Welschof et al. teaches in Figure 4 an annular upturned edge **2d** having radially distributed apertures **2e** for improving the sealing effect of the upturned edge and increase resilience of the boot (col. 3, lines 62-67). Therefore, as taught by Welschof et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to include radially distributed apertures to improve sealing effect of an upturned edge, and increase resilience of a boot.

Applicant is advised that the constant velocity universal joint **1** is for receiving the first end of the propeller shaft; the larger-diameter end is for mating with the first face of the outer race; the radially distributed apertures are for increasing the compressibility of the annular upturned edge; and the sealing end is for providing a seal therewith.

Regarding claim 12, as modified above, Welschof et al. teach the radially distributed apertures **2e** include radially distributed holes.

Regarding claim 13, as modified above, Welschhof et al. teach the radially distributed apertures **2e** include radially distributed cut-outs.

Response to Arguments

Applicant's arguments with respect to claims 1-4 and 8-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 703-308-8606. The examiner can normally be reached from 8:30-5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on 703-308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.


Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3600

E.G.

September 10, 2002

Attachment: one marked-up copy of Moulinet, 6,093,108.

6,093,108

